



DOE Uranium Leasing Program Annual Status and Activities Report for Calendar Year 2019

June 2020



U.S. DEPARTMENT OF
ENERGY

Legacy
Management

Cover Photo: Long Park 16 Headframe and Reclaimed Waste Rock Pile. Located on Lease Tract C-LP-21 on Long Park Mesa, Montrose County, Colorado.

Contents

| | |
|--|-----|
| Abbreviations | ii |
| Executive Summary | iii |
| 1.0 Overview | 1 |
| 2.0 Administrative Operations | 3 |
| 2.1 Civil Action Summons Lawsuit | 3 |
| 2.1.1 Background | 3 |
| 2.1.2 2019 Activities | 3 |
| 2.2 National Historic Preservation Act Section 106 Consultation | 3 |
| 2.2.1 Background | 3 |
| 2.2.2 2019 Activities | 4 |
| 2.3 Mitigation Action Plan | 5 |
| 2.3.1 2019 Activities | 5 |
| 2.4 Reclamation of the Burro Mines Complex | 5 |
| 2.4.1 Background | 5 |
| 2.4.2 2019 Activities | 6 |
| 2.5 Other Administrative Activities | 7 |
| 2.5.1 Section 232 Investigation | 7 |
| 2.5.2 Program Outreach | 8 |
| 2.5.3 Program Coordination with BLM | 8 |
| 2.5.4 Transition to New LM ULP Program Manager | 8 |
| 2.5.5 Lease Agreement Review and Execution Process | 8 |
| 2.5.6 Program Coordination with Colorado Division of Reclamation, Mining and Safety | 9 |
| 2.6 Market Prices | 9 |
| 3.0 Field Operations | 9 |
| 3.1 Lessee Operations | 9 |
| 3.1.1 Cotter Corporation (Cotter) | 10 |
| 3.1.2 Gold Eagle Mining, Inc. (GEMI) | 10 |
| 3.1.3 Golden Eagle Uranium, LLC (GEU) | 10 |
| 3.1.4 Energy Fuels Resources Colorado Plateau, LLC (EFR) | 11 |
| 3.2 Milling Operations | 11 |
| 3.3 Physical Safety Hazards and Environmental Issues | 11 |
| 3.3.1 Hazards | 11 |
| 3.3.2 Noxious Weeds | 12 |
| 3.3.3 Revegetation of Previously Restored Sites | 12 |
| 4.0 References | 13 |

Figures

| | |
|---|----|
| Figure 1. Location and Layout of the ULP Lease Tracts | 2 |
| Figure 2. Hawkeye Ore Bin, Lease Tract C-SR-13, Slick Rock, Colorado | 4 |
| Figure 3. View of the Burro Tunnel Mine Site, Lease Tract C-SR-13, Slick Rock, Colorado | 6 |
| Figure 4. View of the Uintah Mine Complex Revegetation, Lease Tract C-SR-10, San Miguel County, Colorado | 13 |

Table

| | |
|--|---|
| Table 1. Listing of DOE Uranium Lease Tracts and Lessees | 1 |
|--|---|

Abbreviations

| | |
|-------------------------------|---|
| ANL | Argonne National Laboratory |
| BLM | U.S. Bureau of Land Management |
| DOC | U.S. Department of Commerce |
| DOE | U.S. Department of Energy |
| DRMS | Colorado Division of Reclamation, Mining and Safety |
| EA | environmental assessment |
| EFR | Energy Fuels Resources Colorado Plateau LLC |
| FONSI | finding of no significant impact |
| GEMI | Gold Eagle Mining Inc. |
| GEU | Golden Eagle Uranium LLC |
| LM | Office of Legacy Management |
| LMS | Legacy Management Support |
| MAP | Mitigation Action Plan |
| NEPA | National Environmental Policy Act |
| PA | programmatic agreement |
| PEIS | Programmatic Environmental Impact Statement |
| ROD | Record of Decision |
| SHPO | Colorado State Historic Preservation Office |
| TRFO | Tres Rios Field Office |
| U ₃ O ₈ | uranium oxide |
| ULP | Uranium Leasing Program |
| USFWS | U.S. Fish and Wildlife Service |
| V ₂ O ₅ | vanadium oxide |

Executive Summary

This report provides a detailed summary of the U.S. Department of Energy (DOE) Office of Legacy Management (LM) Uranium Leasing Program's (ULP) activities from January 1 through December 31, 2019.

The DOE ULP administers 31 lease tracts, 29 of which are actively held under lease:

- Cotter Corporation (Cotter) controls nine lease tracts: C-JD-6, C-JD-7, C-JD-8, C-JD-9, C-SR-11, C-SR-13A, C-SM-18, C-LP-21, and C-CM-25. During 2019, Cotter maintained its lease tract mining operations in “Temporary Cessation” status while performing routine maintenance activities on all lease tracts, as necessary. Cotter’s nine lease agreements expired effective April 29, 2018.
- Gold Eagle Mining Inc. (GEMI) controls three lease tracts: C-JD-5, C-SR-13, and C-SR-15. During 2019, GEMI maintained its mining operations on tracts C-JD-5 and C-SR-13 in standby status while performing routine maintenance activities on all three lease tracts, as necessary. GEMI’s three lease agreements expired effective April 29, 2018.
- Golden Eagle Uranium LLC (GEU) controls nine lease tracts: C-JD-5A, C-SR-10, C-SR-11A, C-SR-15A, C-SR-16, C-WM-17, C-LP-22, C-LP-22A, and C-LP-23. During 2019, GEU conducted noxious weed treatments on its lease tracts. No active mining operations are located on GEU’s nine lease tracts. GEU’s nine lease agreements expired effective June 26, 2018.
- Energy Fuels Resources Colorado Plateau LLC (EFR) controls seven lease tracts: C-SR-16A, C-AM-19, C-AM-19A, C-AM-20, C-CM-24, C-G-26, and C-G-27. EFR, through its wholly owned subsidiary, Colorado Plateau Partners, also controls lease tract C-SR-12. During 2019, EFR conducted noxious weed treatments on its lease tracts. No active mining operations are located on EFR’s eight lease tracts. EFR’s eight lease agreements expired effective June 26, 2018.

Lease tracts C-JD-8A and C-SR-14 are inactive and will remain so indefinitely.

On February 13, 2019, in accordance with the *Uranium Leasing Program Mitigation Action Plan for the Final Uranium Leasing Program Programmatic Environmental Impact Statement DOE/EIS-0472* (the Mitigation Action Plan [MAP]), LM submitted the ULP MAP Activity Summary Report for 2018 to the DOE Headquarters National Environmental Policy Act (NEPA) Office, stating that no activity had occurred during 2018 due to the existing federal court injunction.

On March 18, 2019, U.S. District Court Judge W. Martinez ruled in favor of DOE in the civil case *Colorado Environmental Coalition v. DOE*. Judge Martinez dissolved the long-standing injunction against DOE and the ULP and closed the case. After the mandatory 60-day appeal period, and advisement by DOE legal staff on May 21, 2019, that no action had been taken by the plaintiffs to appeal the ruling, LM implemented its path forward in accordance with the ULP Programmatic Environmental Impact Statement, the associated Record of Decision, and the MAP.

On April 14, 2019, the U.S. Department of Commerce submitted its report to the White House documenting the results of its Section 232 investigation into the effects of uranium imports on national security. In July, the Trump Administration announced that the investigation had found that imports of uranium are a threat to national security but declined to specifically act on the petition's finding. Instead, the President established the Nuclear Fuel Working Group to further study U.S. nuclear fuel production, including uranium mining, as the next phase of the investigation. In August, ULP personnel responded to a Department of Defense request for information concerning the DOE ULP. The request referenced the Administration's Section 232 inquiry about the domestic nuclear fuel industry (mining, milling, conversion, enrichment, and fabrication). In December, Bloomberg L.P. reported that the Nuclear Fuel Working Group had issued its report to the Trump Administration recommending the establishment of a Department of Defense program to purchase uranium from domestic producers to stimulate the domestic uranium and nuclear industries.

On April 19, 2019, LM reiterated its position to the Colorado State Historic Preservation Office (SHPO), that the Hawkeye ore bin located in San Miguel County is not eligible for listing on the National Register of Historic Places under any criteria and that it would be taken down and removed to mitigate the safety hazard. LM also advised the SHPO that LM would coordinate with U.S. Bureau of Land Management (BLM) and other interested stakeholders to investigate the potential for documenting the Slick Rock area as being historically significant. On September 25, 2019, after not having received any correspondence from the SHPO denying concurrence with LM's position, LM advised the SHPO that the Hawkeye ore bin would be taken down to eliminate the physical safety hazard associated with the feature and that the work would be scheduled as soon as possible.

In April 2019, ULP personnel reviewed the Preliminary Environmental Assessment (EA) prepared by the BLM Tres Rios Field Office (TRFO) concerning the proposed areas of critical environmental concern to compile specific information pertinent to the ULP. On April 22, 2019, on behalf of the LM ULP Team lead, ULP personnel prepared and uploaded a comment to the TRFO website concerning the EA. The comment acknowledged that Alternatives 1, 2, and 3 would not impact future ULP activities but Alternative 4 would, and therefore could not be supported by LM.

On June 19, 2019, following the federal court's action to dissolve the injunction, Legacy Management Support (LMS) personnel initiated planning for the reclamation of the Burro Mines complex. The preliminary scope of work was reviewed along with the tentative schedule of activities. On June 20, 2019, ULP personnel participated in a conference call with LM and the Argonne National Laboratory (ANL) concerning NEPA issues. LM contracted ANL to prepare an EA for the reclamation project. On June 27, 2019, ULP personnel and support staff toured the reclamation site to review the proposed activities and collect initial data and information to support the engineering design work. During the remainder of the year, numerous activities were undertaken to support the reclamation project.

On July 16, 2019, in accordance with Section 106 of the National Historical Preservation Act and the *Programmatic Agreement Among the U.S. Department of Energy-Office of Legacy Management, the U.S. Department of the Interior-Bureau of Land Management-Colorado State Office, the Colorado State Historic Preservation Office, and the Pueblo of Zuni Regarding the Uranium Leasing Program Within Mesa, Montrose, and San Miguel Counties, Colorado*

(hereafter referred to as the Programmatic Agreement [PA]), executed April 15, 2014, DOE formally notified the interested parties by letter that no activities had been conducted on the DOE lease tracts during the previous year and that no revisions to the original PA were required.

On July 18, 2019, ULP personnel participated in a conference call with LM and the Colorado Division of Reclamation, Mining and Safety (DRMS) concerning the memorandum of understanding between the two agencies. LM briefed DRMS personnel on the status of the ULP and the proposed path forward of executing new 10-year leases with the existing lessees. During the ensuing discussion, the agencies agreed that the memorandum of understanding did not need to be revised at this time; however, it would be reviewed again after ULP activities began to progress. In September, LM/LMS personnel met with representatives from Colorado DRMS to discuss the recent decision from the Colorado Court of Appeals concerning the temporary cessation status of the Van 4 Mine (a non-DOE lease tract mine) and the ramifications the decision could have on various lease tract mining operations.

On July 31, 2019, LM forwarded the ULP standard lease template to the lessees for review and consideration. On October 8 and 9, 2019, LM and LMS personnel met with each of the lessees to review and discuss the new lease agreement template in preparation of executing new agreements, and no significant issues were noted. On November 22, 2019, new lease agreements were forwarded to each of the four lessees for review with the objective to have all leases fully executed by January 6, 2020.

In September 2019, ULP personnel performed formal inspections of all existing, permitted mining operations, which included Cotter's mines on lease tracts C-JD-6, C-JD-7, C-JD-8, C-JD-9, C-SR-11, C-SR-13A, and C-SM-18 and GEMI's mines on lease tracts C-JD-5 and C-SR-13. No major issues were noted at any of the mine sites. Some minor issues, including the presence of noxious weeds, erosional rilling, repeated vandalism, and a need for better housekeeping, were noted at one or more of the locations.

Throughout 2019, ULP personnel fenced multiple subsidence features on various lease tracts to mitigate the physical safety hazards associated with those features.

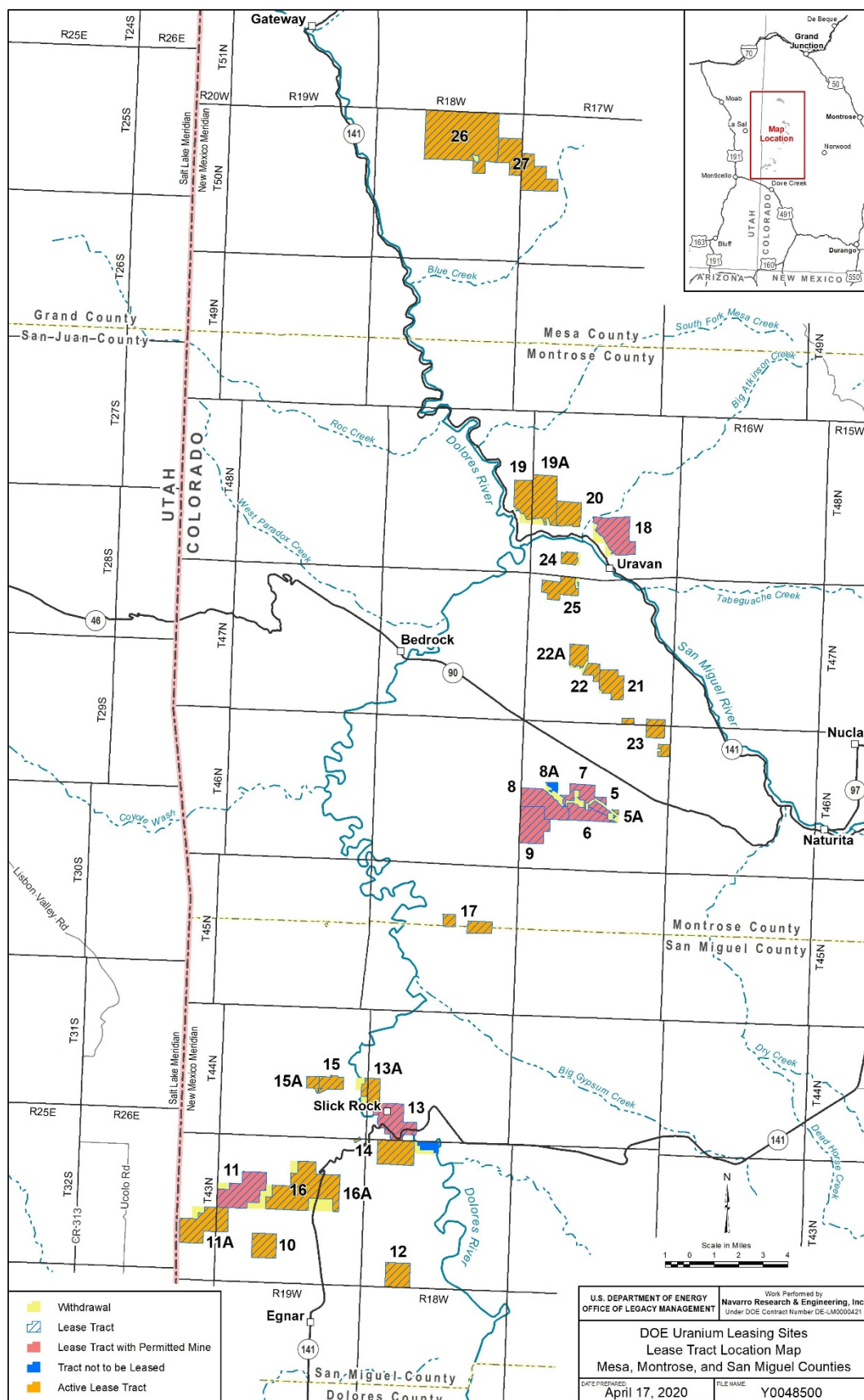
The fair market value of lease tract ores per dry ton with average grades of 0.20% uranium oxide (U_3O_8) and 1.20% vanadium oxide (V_2O_5), as calculated for production royalty purposes, began 2019 at \$428 per ton. The value fluctuated somewhat for the next 2 months, before steadily retreating to \$218 per ton at year's end.

1.0 Overview

The U.S. Department of Energy (DOE) Office of Legacy Management (LM) Uranium Leasing Program (ULP) administers 31 lease tracts (Table 1 and Figure 1), 29 of which are actively held under lease. This report provides a detailed summary of the ULP activities from January 1 through December 31, 2019.

Table 1. Listing of DOE Uranium Lease Tracts and Lessees

| Lease Tract | Lessee |
|--------------------|---------------------------|
| C-JD-5 | Gold Eagle Mining Inc. |
| C-JD-5A | Golden Eagle Uranium LLC |
| C-JD-6 | Cotter Corporation |
| C-JD-7 | Cotter Corporation |
| C-JD-8 | Cotter Corporation |
| C-JD-8A | Inactive, not leased |
| C-JD-9 | Cotter Corporation |
| C-SR-10 | Golden Eagle Uranium LLC |
| C-SR-11 | Cotter Corporation |
| C-SR-11A | Golden Eagle Uranium LLC |
| C-SR-12 | Colorado Plateau Partners |
| C-SR-13 | Gold Eagle Mining Inc. |
| C-SR-13A | Cotter Corporation |
| C-SR-14 | Inactive, not leased |
| C-SR-15 | Gold Eagle Mining Inc. |
| C-SR-15A | Golden Eagle Uranium LLC |
| C-SR-16 | Golden Eagle Uranium LLC |
| C-SR-16A | EFR Colorado Plateau LLC |
| C-WM-17 | Golden Eagle Uranium LLC |
| C-SM-18 | Cotter Corporation |
| C-AM-19 | EFR Colorado Plateau LLC |
| C-AM-19A | EFR Colorado Plateau LLC |
| C-AM-20 | EFR Colorado Plateau LLC |
| C-LP-21 | Cotter Corporation |
| C-LP-22 | Golden Eagle Uranium LLC |
| C-LP-22A | Golden Eagle Uranium LLC |
| C-LP-23 | Golden Eagle Uranium LLC |
| C-CM-24 | EFR Colorado Plateau LLC |
| C-CM-25 | Cotter Corporation |
| C-G-26 | EFR Colorado Plateau LLC |
| C-G-27 | EFR Colorado Plateau LLC |



2.0 Administrative Operations

The following subsections summarize the ULP's primary administrative activities during 2019.

2.1 Civil Action Summons Lawsuit

(Colorado Environmental Coalition v. Office of Legacy Management, and United States Department of Energy)

2.1.1 Background

On June 26, 2018, following completion of consultation with the U.S. Fish and Wildlife Service (USFWS) concerning the water depletion issue, DOE filed a motion with the U.S. District Court for the District of Colorado (Court) to dissolve the injunction in its entirety and close the case. To support its motion, DOE provided the Court with the supplemental biological assessment concerning potential water depletion by ULP lessee activities and other related actions, and the resulting biological opinion issued by USFWS.

On August 16, 2018, the plaintiffs filed their response with the Court, opposing DOE motion to dissolve the injunction. On September 28, 2018, DOE filed its reply brief with the Court. At that time, all evidence and associated information was before the Court for its consideration and ruling.

2.1.2 2019 Activities

On March 18, 2019, U.S. District Court Judge W. Martinez ruled in favor of DOE in the case Colorado Environmental Coalition v. DOE. Judge Martinez dissolved the 8-year injunction against DOE and the ULP and closed the case. On May 21, 2019, after the mandatory 60-day waiting period for appeals, DOE legal staff advised that no action had been taken by the plaintiffs to appeal the ruling. The DOE Office of General Counsel further advised LM that it could move forward with the implementation of a new 10-year leasing program, but admonished LM to ensure that all activities were conducted in accordance with the ULP Programmatic Environmental Impact Statement (PEIS), the associated Record of Decision (ROD), and the Mitigation Action Plan (MAP).

2.2 National Historic Preservation Act Section 106 Consultation

2.2.1 Background

In accordance with Section 106 of the National Historical Preservation Act, LM entered into a cultural resources programmatic agreement, *Programmatic Agreement Among the U.S. Department of Energy-Office of Legacy Management, the U.S. Department of the Interior-Bureau of Land Management-Colorado State Office, the Colorado State Historic Preservation Office, and the Pueblo of Zuni Regarding the Uranium Leasing Program Within Mesa, Montrose, and San Miguel Counties, Colorado* (DOE 2014a) (hereafter referred to as the Programmatic Agreement [PA]), effective April 15, 2014.

2.2.2 2019 Activities

On July 16, 2019, the Legacy Management Support (LMS) contractor completed the ULP 2019 PA Annual Briefing as required in the PA and submitted it to LM for review and distribution. On July 29, 2019, the ULP 2019 PA Annual Briefing was finalized and distributed to the interested parties.

In October 2018, LM initiated consultation with the Colorado State Historic Preservation Office (SHPO) concerning the status of a metal ore bin located on the Hawkeye patented mining claim on lease tract C-SR-13. The ore bin was erected circa 1952 as part of the ore handling system established for the Hawkeye uranium mine, which operated in 1952–1953 and again briefly in the mid-1970s. In the early 2000s, the entire mine site was reclaimed by the lessee, except for the mine portal, which was gated to conserve the mine workings for potential bat habitat, and the ore bin, which was left in place for its historic value. Eventually, stormwater runoff from several major storm events eroded the ground surface below the ore bin, causing it to lean precariously downslope and become a physical safety hazard. As a result, LM proposed to the SHPO that the lessee be allowed to remove the ore bin to eliminate the safety hazard. As part of the consultation, the ore bin was documented and recorded. Because of its loss of historic integrity, the ore bin was determined to not be eligible for listing on the National Register of Historic Places. In response to LM's request, the SHPO recommended that the structure be reconsidered within the realm of a larger historic district. In a letter to the SHPO dated April 11, 2019, LM reiterated its position that the Hawkeye ore bin (Figure 2) was not eligible for listing under any criteria and that it would be taken down and removed to mitigate the safety hazard. LM also advised the SHPO that LM would coordinate with the U.S. Bureau of Land Management (BLM) and other interested stakeholders to investigate the potential for documenting the Slick Rock area as being historically significant.



Figure 2. Hawkeye Ore Bin, Lease Tract C-SR-13, Slick Rock, Colorado

On September 25, 2019, after not having received any correspondence from SHPO denying concurrence with LM's position, LM advised the SHPO that the Hawkeye ore bin would be taken down to eliminate the physical safety hazard associated with the feature and that the work would be scheduled as soon as logistically possible.

2.3 Mitigation Action Plan

In accordance with the *Uranium Leasing Program Mitigation Action Plan for the Final Uranium Leasing Program Programmatic Environmental Impact Statement DOE/EIS-0472* (DOE 2014b) (the Mitigation Action Plan [MAP]), LM is required to submit an annual summary report of mitigation activities completed by ULP lessees.

2.3.1 2019 Activities

On February 13, 2019, the LMS contractor completed the ULP MAP Activity Summary Report for 2018 and submitted it to LM for review. The document was transmitted to the DOE Headquarters National Environmental Policy Act (NEPA) Office on the same day, advising that no activity had occurred during 2018 due to the Court injunction.

2.4 Reclamation of the Burro Mines Complex

2.4.1 Background

In March 2016, following a series of storm events that inundated the Slick Rock, Colorado, area during the previous decade and repeatedly eroded mine-waste-rock materials from the Burro Tunnel mine site (located on lease tract C-SR-13) (Figure 3) into the immediately adjacent Dolores River, ULP personnel developed a proposal to reclaim the site. The proposal included several options. The baseline option called for the lessee's permitted portion of the Burro Tunnel mining operation to be reclaimed in place when the lessee's mining operation ceased. Option 1 called for the entire Burro Tunnel mine-waste-rock pile to be reclaimed in place, while leaving the lessee's actively permitted infrastructure intact. Option 2 called for relocating the entire Burro Tunnel mine-waste-rock pile to an abandoned gravel pit located south of the existing mine, but still within the bounds of lease tract C-SR-13. This option would also preserve the lessee's actively permitted infrastructure. Option 3 was additive to Option 2 and would also relocate a portion of the mine-waste-rock piles from the adjacent Burro Nos. 3 and 5 mine sites to the same abandoned gravel pit, and then reclaim and stabilize the remainder of the two mine-waste-rock piles to minimize the potential for future erosion.



Figure 3. View of the Burro Tunnel Mine Site, Lease Tract C-SR-13, Slick Rock, Colorado (the Burro No. 3 shaft mine site is in the background)

2.4.2 2019 Activities

On June 19, 2019, following the Court's action to dissolve the injunction, LMS personnel participated in a kickoff meeting for the Burro Mines reclamation project. The preliminary scope of work was reviewed along with the tentative schedule of activities (NEPA, engineering design and construction). A site visit occurred June 27, 2019. LMS personnel toured the reclamation site to review the proposed activities and to collect initial data and information to support the engineering design work. During July, physical land surveying activities were completed to establish surface control stations at the site and collect other GPS information to support the ongoing engineering design work. On December 17, 2019, LMS personnel revisited the site and gathered additional data needed to support engineering design activities, including the design of the proposed haul road across the Burro Canyon drainage.

On June 20, 2019, ULP personnel participated in a conference call with representatives from LM and Argonne National Laboratory (ANL) concerning NEPA issues. LM contracted ANL to perform several NEPA functions associated with the ULP, including preparing an environmental assessment (EA) for the reclamation project. On July 11, 2019, LM and LMS personnel were apprised of ANL's preliminary schedule that indicated the EA would be completed by early November 2019, with the associated finding of no significant impact (FONSI) being issued in early December 2019. At LM's request, LMS personnel revised ANL's schedule to include more significant detail. The revised schedule has the final EA and FONSI being issued in December 2020.

In July 2019, LM and LMS initiated consultation with USFWS in support of the reclamation project. The discussions led to references to prior consultation with the agency. In August, LM advised USFWS personnel that prior consultations had concluded in the preparation of two biological assessments, the first one covering various species in general, including the endangered Colorado River fish, and the second one covering two recently listed bird species. Both biological assessments covered areas near and adjacent to the Burro Mines. In early September, USFWS personnel advised LM and LMS personnel that additional consultation with the agency was not needed.

During August 2019, LMS personnel prepared letters to federal and state agencies, residents, land owners, and other interested parties, plus a public notice concerning the Burro Mines reclamation project and the ensuing EA. In September, LMS personnel were advised that notification letters to state and national representatives were required to be sent out in advance to the other notifications. The letters to state representatives and members of Congress, notifying them of the Burro Mines reclamation project that LM has proposed, were issued on December 27, 2019. The public notice will be issued in 2020.

On September 17, 2019, ULP personnel met with representatives from the BLM Tres Rios Field Office (TRFO) at the Burro Mines complex on lease tract C-SR-13 to discuss the historical nature of the complex and the need to perform an architectural history survey of site features to support the reclamation project. On November 15, 2019, LM issued a letter to the TRFO concerning the cultural resources surveys (architectural and archaeological) required for the Burro Mines reclamation project. The letter indicated that LMS personnel would conduct the architectural survey and that TRFO personnel would conduct the archaeological survey, with the surveys tentatively scheduled for the first week of December 2019. On December 5, 2019, LMS personnel visited the Burro Mines complex and performed an architectural survey of the potentially historic site features. The archaeologist from the TRFO was scheduled to meet with LMS personnel at the site to perform the archaeological survey, but the trip was postponed by adverse weather.

2.5 Other Administrative Activities

2.5.1 Section 232 Investigation

In January 2018, Energy Fuels Inc. (parent company to EFR Colorado Plateau) and Ur-Energy jointly submitted a petition to the U.S. Department of Commerce (DOC) for Relief Under Section 232 of the Trade Expansion Act of 1962 (as amended) from Imports of Uranium Products That Threaten National Security. In July 2018, DOC formally accepted the petition and initiated an investigation into the effects of uranium imports on national security. On April 14, 2019, DOC submitted a report to the White House documenting the results of its investigation into the effects of uranium imports on national security. On July 12, 2019, the President announced that imports of uranium are a threat to national security but declined to specifically act on the petition's finding. Instead, the President established the Nuclear Fuel Working Group to further study U.S. nuclear fuel production, including uranium mining, as the next phase of the investigation.

On August 21, 2019, ULP personnel responded to a Department of Defense request for information concerning the DOE Uranium Leasing Program. The request referenced the

Trump Administration's Section 232 inquiry about the domestic nuclear fuel industry (mining, milling, conversion, enrichment, and fabrication). On December 5, 2019, Bloomberg L.P. reported that the Nuclear Fuel Working Group had issued its report to the Trump Administration recommending the establishment of a Department of Defense program to purchase uranium from domestic producers to stimulate the domestic uranium and nuclear industries. No official notification of the report's issuance has been released.

2.5.2 Program Outreach

On January 14, 2018, ULP personnel participated in a kickoff conference call between LM and Edelman, a public relations firm contracted by LM to assist in future stakeholder outreach activities for the ULP. On June 18, 2019, ULP personnel hosted a one-day tour of selected lease tracts for representatives from LM and LMS management and Edelman. The tour included stops at the King Solomon Mine on C-AM-19, the C-LP-21 Mine, and the Bitter Creek Defense-Related Uranium Mine. The tour and associated information were well received by the various participants. A debriefing meeting with Edelman staff was held the following day. Discussions centered around the positive messaging that Edelman could deliver to the ULP stakeholders and other interested members of the public. Later in 2019, ULP personnel continued to support LM's discussions with Edelman concerning public outreach and the many needs of the ULP.

2.5.3 Program Coordination with BLM

On February 8, 2019, LM received notice from the TRFO that it was preparing a Transportation and Access Plan and associated EA to designate access routes in Montrose, San Miguel, and Dolores Counties. The notice included an inquiry to LM about becoming a cooperating agency in the process. LM requested additional information on the plan but declined to become a cooperating agency.

On February 20, 2019, LM received notice from the TRFO that the preliminary EA concerning the proposed areas of critical environmental concern was available for public review and comment. ULP personnel reviewed the EA to compile specific information pertinent to the ULP. On April 22, 2019, on behalf of the LM ULP Team lead, ULP personnel prepared and uploaded comments to the TRFO website concerning the preliminary EA. The comment acknowledged that Alternatives 1, 2, and 3 would not impact future ULP activities but that Alternative 4 had the potential to impact future ULP activities and, therefore, could not be supported by LM.

2.5.4 Transition to New LM ULP Program Manager

In April 2019, Mr. William L. Dam, LM ULP Program manager, announced his retirement from LM. Ms. Deborah Barr was designated to replace Mr. Dam as the LM ULP Program manager. During April and May, ULP personnel provided multiple documents and other project information pertaining to the ULP to assist in the transition between managers.

2.5.5 Lease Agreement Review and Execution Process

On July 31, 2019, LM forwarded the ULP standard lease template to the lessees for review and consideration, along with the proposed schedule of the lease execution process and the

environmental stipulations cross referenced between the new lease template and the previous lease agreement. On October 8 and 9, 2019, LM and LMS personnel met individually with each of the lessees to review and discuss the new lease template in preparation of executing new 10-year lease agreements. No significant issues were noted by the lessees. On November 22, 2019, new lease agreements were forwarded to each of the four lessees for review and execution. The transmittal letter requested that the lessees return the signed lease agreements (two copies) to LM, with the goal to have all leases fully executed by January 6, 2020.

2.5.6 Program Coordination with Colorado Division of Reclamation, Mining and Safety

On July 18, 2019, ULP personnel participated in a conference call with the Colorado Division of Reclamation, Mining and Safety (DRMS) concerning the memorandum of understanding between the two agencies. LM briefed DRMS personnel on the status of the ULP and the proposed path forward (executing new 10-year leases with the existing lessees). During the ensuing discussion, the agencies agreed that the memorandum of understanding did not need to be revised at this time; however, it would be reviewed again after ULP activities begin to progress.

On September 12 and 13, 2019, LM/LMS personnel met with representatives from DRMS, BLM, and the lessees to conduct annual inspections of the lessee's permitted mining operations. All sites were found to be in good condition, with no significant safety or environmental issues noted. On November 14, 2019, the LMS contractor submitted the 2019 Annual Lease Tract Inspection Reports to LM for review and consideration.

On September 19, 2019, LM/LMS personnel met with representatives from DRMS to discuss the recent decision from the Colorado Court of Appeals concerning the temporary cessation status of the Van 4 Mine (a non-DOE lease tract mine) and the ramifications the decision could have on various lease tract mining operations.

2.6 Market Prices

During 2019, the fair market value of lease tract ores per dry ton with average grades of 0.20% uranium oxide (U_3O_8) and 1.20% vanadium oxide (V_2O_5), as calculated for production royalty purposes, began 2019 at \$428 per ton. The value fluctuated somewhat for the next 2 months, before steadily retreating to \$218 per ton at year's end.

3.0 Field Operations

3.1 Lessee Operations

On March 18, 2019, the Court ruled in favor of DOE and dissolved the 8-year injunction against DOE and the ULP. On March 25, 2019, the four lessees were advised of the Court's ruling. During the next 4 months, LM devised a path forward for the implementation of its preferred alternative as defined in the PEIS and associated ROD, including the lease agreement review and execution process noted above.

3.1.1 Cotter Corporation (Cotter)

On January 8, 2019, Anfield Energy Inc. (Anfield), announced by press release that it had signed an Asset Purchase Agreement with Cotter Corporation to acquire various uranium/vanadium properties, including the “West Slope Project,” consisting of the nine DOE lease tracts held by Cotter, along with the adjacent lode mining claims. On March 1, 2019, Anfield announced (again by press release) that it had closed on its previously announced transaction to acquire certain uranium properties from Cotter. DOE advised both Cotter and Anfield that no action could be taken by either party until new 10-year leases were executed by DOE and Cotter—at which time, DOE would determine if Anfield was qualified to be a lessee under Title 10 *Code of Federal Regulations* Section 760.1, and if so, would consider approving the lease assignments between Cotter and Anfield. As part of that process, Anfield would be required to post new reclamation bonds with DOE and deal with DRMS to transfer Cotter’s mining permits into their name. The former support staff from Cotter’s western slope operations office transitioned to similar roles with a company called Highbury Resources LLC (Highbury), a wholly owned subsidiary to Anfield.

Cotter currently controls nine lease tracts: C-JD-6, C-JD-7, C-JD-8, C-JD-9, C-SR-11, C-SR-13A, C-SM-18, C-LP-21, and C-CM-25. During 2019, Highbury personnel performed routine maintenance activities at Cotter’s various mining operations to protect its financial investments and keep the sites secured in a physically safe and environmentally sound manner. These routine activities included inspecting site features and facilities (e.g., mine portals, ventilation systems, buildings, storm-water-control structures) to determine if maintenance actions were required. Personnel checked the lysimeters at the C-JD-6, C-JD-8, C-JD-9, and C-SM-18 mine sites quarterly to determine if mine-related contamination was leaching from them. No measurable water was detected at these lysimeters, and no leaching has been detected to date. Cotter personnel also sampled the groundwater well at the C-JD-9 mine each quarter to determine if the mine’s presence had affected groundwater.

3.1.2 Gold Eagle Mining, Inc. (GEMI)

GEMI currently controls three lease tracts: C-JD-5, C-SR-13, and C-SR-15. During 2019, GEMI personnel performed routine maintenance activities at its various mining operations to protect its financial investments and keep the sites secured in a physically safe and environmentally sound manner. These routine activities included the removal of debris and inspecting site features and facilities (e.g., mine portals, ventilation systems, buildings, storm-water control structures) to determine if further actions were required. GEMI personnel also conducted noxious weed control treatments throughout its lease tracts.

Please refer to Sections 2.2.2 and 2.4 above for specific discussions concerning the Hawkeye ore bin and the Burro Mines reclamation project, both located on lease tract C-SR-13.

3.1.3 Golden Eagle Uranium, LLC (GEU)

GEU currently controls nine lease tracts: C-JD-5A, C-SR-10, C-SR-11A, C-SR-15A, C-SR-16, C-WM-17, C-LP-22, C-LP-22A, and C-LP-23; but GEU does not maintain active mining operations on any of them. During 2019, GEU conducted noxious weed control treatments on lease tracts under its control.

3.1.4 Energy Fuels Resources Colorado Plateau, LLC (EFR)

EFR, a wholly owned subsidiary of Energy Fuels Resources Corporation, currently controls eight lease tracts; seven of them are held directly (C-SR-16A, C-AM-19, C-AM-19A, C-AM-20, C-CM-24, C-G-26, and C-G-27), and one (C-SR-12) is held by EFR's subsidiary, Colorado Plateau Partners. EFR does not maintain mining operations on its lease tracts. During 2019, EFR continued to inspect its lease tracts for noxious weed infestations.

3.2 Milling Operations

The White Mesa uranium mill (Mill) south of Blanding, Utah, is owned and operated by Energy Fuels Inc. It is the only operating, conventional uranium processing mill in the United States and has a licensed capacity of 2000 tons per day and can produce up to 8 million pounds of uranium oxide per year. The facility also has a co-recovery circuit to process vanadium ores commonly found in the Colorado Plateau and an alternate feed circuit to process other uranium-bearing materials, such as those derived from uranium conversion and other metal processing.

During 2019, there was very little uranium production. The Mill mainly focused on producing vanadium, producing approximately 1.8 million pounds of vanadium, as V₂O₅ "black flake." This vanadium was recovered from existing tailings pond solutions that resulted from past mining campaigns. The Mill's focus on vanadium production was due to a price spike that occurred from late-2018 to early-2019. However, by the second quarter of 2019, the price of vanadium had dropped significantly off its year-end highs, and the Mill ceased vanadium production by the end of 2019.

The Mill also continued to stockpile alternate feed materials for future processing. In addition, the owner of the Mill aggressively pursued involvement in the cleanup of abandoned uranium mines in the Navajo Nation and Four Corners Region. The Mill offers a responsible, low-cost method of recycling material generated by the Navajo Nation and the U.S. government from cleanup activities and would recover uranium from that material that could be used to generate clean electricity. The Mill is currently licensed to this material, and it has a 1.5 million dry ton tailings facility ready to begin accepting material immediately.

3.3 Physical Safety Hazards and Environmental Issues

3.3.1 Hazards

In 2019, new physical safety hazards were identified on six lease tracts. These new features likely resulted from the extremely wet winter and spring and will need to be monitored.

During the court injunction, ULP personnel identified multiple physical safety hazards on several lease tracts. All known physical safety hazards have been fenced to preclude human entry and wildlife or livestock entrapment. A list of action items has been compiled, and the respective ULP lessees will likely be asked to mitigate these hazards once normal, mining-related activities resume. The ULP's goal is to have the lessees address these issues through the reclamation in lieu of royalty process, as has been utilized historically. Activities will likely occur during the second year of the lease term, as there are no royalties due in year one.

3.3.2 Noxious Weeds

In 2019, the ULP provided funding to the San Miguel County Weed Control Program and Montrose County Ecological Services Department to treat infestations of noxious weeds—primarily Russian knapweed, halogeton, and tamarisk—along the numerous county roads that access or traverse the lease tracts. In addition, the lessees treated multiple infestations of noxious weeds on and adjacent to their respective lease tracts. They documented their treatments on BLM’s Pesticide Application Record forms and provided them to LM in 2019.

Since 2011, LM has coordinated with the Dolores River Restoration Partnership, a group of public and private entities whose main purpose is to treat and remove tamarisk and other noxious weeds along the Dolores River corridor through lease tract C-SR-13 and restore the area with native species. Approximately 3 miles of the river transects the lease tract. ULP ecologists have monitored the success of these weed-control efforts annually for the last 7 years and have noted that noxious weed cover has been significantly reduced and native species are returning to much of the treated area. In 2019, approximately 2.1 acres of noxious weeds were treated.

In October 2017, ULP personnel partnered with BLM, San Miguel County, and Southwest Conservation Corps to treat approximately 8 acres of noxious weeds along the Dolores River corridor on Tract 3 of lease tract C-SR-14, in a remote and hard-to-access area. In October 2018, BLM and the Southwest Conservation Corps agreed to continue weed treatments in this area and treated about 7 acres. ULP personnel assisted them by hauling herbicide to the treatment area by utility vehicle. This work also supported the goals of the Dolores River Restoration Partnership.

3.3.3 Revegetation of Previously Restored Sites

ULP personnel conducted formal revegetation assessments on eight lease tracts in 2019 (e.g., in Figure 4). The majority of the reclamation activities performed in the last 10 years have remained erosionally stable and established desirable vegetation. There are a few sites that are close to meeting the revegetation criteria, and these sites will continue to be monitored for noxious weeds in the future. All sites will continue to be monitored for erosion and slope stability during inspection events in the future.



Figure 4. View of the Uintah Mine Complex Revegetation, Lease Tract C-SR-10, San Miguel County, Colorado

4.0 References

DOE (U.S. Department of Energy), 2014a. *Programmatic Agreement Among the U.S. Department of Energy-Office of Legacy Management, the U.S. Department of the Interior-Bureau of Land Management-Colorado State Office, the Colorado State Historic Preservation Office, and the Pueblo of Zuni Regarding the Uranium Leasing Program Within Mesa, Montrose, and San Miguel Counties, Colorado*, April.

DOE (U.S. Department of Energy), 2014b. *Uranium Leasing Program Mitigation Action Plan for the Final Uranium Leasing Program Programmatic Environmental Impact Statement DOE/EIS-0472*, Office of Legacy Management, November.